Appendix - Data Selection Process; Coding Sheet

1. Data Selection Process

The first step of the data collection process consisted of identifying potentially relevant actors for the study objectives, and from there searching for relevant documentation to include in the data selection. The actors could be identified after conducting fieldwork in the study region and throughout the readings of the literature review for this thesis. The first delimitation process took place during this process, where actors that did not actively work with wind energy in the study region were excluded, as well as actors that did not provide any relevant documentation that could assist in answering the research questions nor addressing the major themes for this study. Below are lists of actors included in the analysis.

Table 1.1. List of governmental actors included in the analysis.

Actor	**About**	**Delimitation process**	**Document(s) for analysis**
Assembleia Legislativa da Bahia (Legislative Assembly of Bahia) **Website:** https://www.al.ba.gov.br/	The Legislative Assembly of Bahia is the body of legislative power of the state of Bahia, exercised through the elected state deputies. Only entity that is directly connected to the state Bahia.	Typing the key words 'wind energy' and 'Bahia' gave 5 results, of which 2 legislation proposals were excluded for not assisting in answering the research questions of this study.	**(1)** Legislation proposal N° IND/23.187/2019 **(2)** Legislation proposal N° IND/23.131/2019 **(3)** Projeto de lei N° 23.358/2019 - Dispõe sobre a política de incentivo ao uso da energia eólica e dá outras providências (Project of Law N° 23.358/2019, regarding political inventivos of wind energy and other sources/measures)
BNDS - Banco Nacional de Desenvolvimento (National Development Bank)	**L**inked to the Ministry of Economy, BNDES is the main instrument of the Federal Government to promote long-term investments in the Brazilian economy.	A total of 3 articles found, of these 2 articles were excluded for not containing information that was aligned with the major themes or study objective as well as not assisting in answering the RQ of this study.	**(1)** "Mais sete usinas eólicas serão construídas no interior da Bahia com o apoio do BNDES" (Seven more wind farms will be built in the interior of Bahia with the support of BNDES) - published 02/02/2022.

Website:https://www.bndes.gov.br/wps/portal/site/home			
Centro Clima - Centro de Estudo Integrado sobre meio ambiente e mudanças climáticas (COPPE) - Center for Integrated Study on the environment and climate change. **Website:**http://www.centroclima.coppe.ufrj.br/index.php/br/	Linked to the Energy Planning Program (PPE) and part of COPPE at the Federal University of Rio de Janeiro (UFRJ). Participates in the development of public policies, strengthening the national and international training of different social actors regarding actions to mitigate and adapt to climate change. Although this report does not explicitly address Bahia or the Northeast, it provided valuable information on topics that were not commonly addressed in other documents reviewed.		**(1)** 'Climate Transparency Policy Paper: Energy Transition in Brazil', written in collaboration with the international organization Climate Transparency (a global partnership with a mission to stimulate climate action in G20 countries). Document is originally written in english. Authors: William Wills, Fernanda Fortes Westin 2019
EPE - Empresa de Pesquisa Energética (National Company for Energy Research) **Website:** https://www.epe.gov.br/pt	Branch of **MME**- MME's institutional mission is to "formulate and ensure the implementation of Public Policies for the sustainable management of energy and mineral resources, contributing to the socio-economic development of the country". All though report 2 and 3 does not explicitly address Bahia or the Northeast, they are considered valuable due to containing important information that correlated with the study objectives.	The most recent reports aligned with the study objectives were selected, other reports were immediately excluded.	**(1)** 'Plano decenal de expansão de energia 2030 (Decennial plan for the energy expansion 2030) **(2)** Plano Nacional de Energia 2030 (National Energy Plan 2030) **(3)** Relatório final do Plano Nacional de Energia 2050 (Final report on the national energy plan for 2050)
Governo Federal do Brasil (Federal Government of Brazil)		Using the keywords "wind energy" and "Bahia" have various news articles. Articles containing secondary data were excluded, as well as articles produced primarily by a specific ministry or branch of government. One article encountered that was produced by the Federal Government, correlating to the study objectives and within the five year time span.	**(1)** Governo Federal autoriza 10 usinas eólicas na Bahia (Federal Government authorized 10 wind plants in Bahia) - published 13/01/2021

MDR - Ministério de Desenvolvimento Regional (Ministry of Regional Development)		A total of 11 articles were found when typing the keywords "wind power" and "Bahia". All articles were further examined but excluded due to referring to secondary sources and not complying with the study objectives.	
MME - Ministério de Minas e Energia (Ministry of Mines and Energy)	See EPE		
SUDENE - Superintendência do Desenvolvimento do Nordeste (Northeast Development Superintendence)	The Northeast Development Superintendence (SUDENE) is a special, administrative and financially autonomous agency, part of the Federal Planning and Budget System, and branch of the Ministry for Regional Development.	A total of 7 news articles found when typing the keywords' wind power' and 'Bahia', of these 6 were considered as not relevant for the study objectives due to being written past the five-year timespan or not containing further information in accordance with the study objectives.	**(1)** "Sudene aprova liberação de R$ 51,2 milhões para projetos de energia eólica na Bahia" ("Sudene approves release of R$ 51.2 million for wind energy projects in Bahia") - news article published 04/11/2021)

Table 1.2 - Non-governmental actors and documents included in analysis.

Name	About	Delimitation process	Documents for analysis
ABEEólica - Associcação Brasileira de Energia Eólica, (The Brazilian Wind Power Association) **Website**: http://abeeolica.org.br/en/	A non-profit organization that brings together and represents the wind power sector in Brazil.		**(1)** Annual wind energy report 2020 (report written in English) **(2)** Impactos socioeconômicos e ambientais da geração de energia eólica no Brasil (Socioeconomic and environmental impacts of the generation of wind energy in Brazil), written in July 2020.
ASA - Articulação Semiárido Brasileiro	ASA is a network including thousands civil society organizations, associations, and cooperatives, that defends, propagates and puts into practice, including	Articles found but excluded in the second step of the data collection process were excluded on one or more of	**(1)** "Seminário regional debateu sobre impactos dos parques de energia eólica no Nordeste" (Regional

(Brazilian Semiarid Articulation) **Website:**https://www.asabrasil.org.br/	through public policies, the political project of coexistence with the semiarid region.	the following ground: they did not relate to or assist in answering the research questions of this study; they did not account for wind power installations in the study region; they were written prior to 2016.	seminar debated the impacts of wind energy parks in the Northeast) - news published 03/10/**2017**
CERSA - Comité de Energia Renovável do Semiárido (The Committee for Renewable Energy in the Semiarid) **Website**: http://cersa.org.br/	CERSA is a collective including organizations, researchers and collaborators, making awareness of the Brazilian semiarid region as having one of the highest insolation rates on the planets, giving it a privileged potential to contribute to producing solar and thermal energy (wind?).	Articles found but excluded in the second step of the data collection process were excluded on one or more of the following ground: they did not relate to assist in answering the research questions of this study; they did not account for wind power installations in the study region; they were opinion articles and thus considered too bias to be included in the analysis.	**(1)** Negócios do vento: arrendamento ou expropriação de terra? (Wind business: land lease or expropriation?). Article published 16/03/2021
CPT - Comissão Pastoral da Terra (Pastoral Land Commission) **Website:**https://www.cptnacional.org.br/	CPT is a non-profit civil institution working on agrarian issues and issues related to land, water and energy. CPT acts as a representative of residents and farmers in communities and/or settlements where there are conflicts related to land and renewable energy.	Articles and documents written priorly to the five year timespan excluded, as well as articles/documents referring to primary source excluded.	**(1)** "Conflitos no Campo 2020" (Conflicts in the field 2020) - a report written by CPT, written annually, accounts for and maps various conflicts (land, water, labor exploitation etc) in the field (rural) throughout the nation.
De olho nos Ruralistas (Keeping an Eye on the Ruralists) **Website:**https://deolhonosruralistas.com.br	De Olho nos Ruralistas is an agribusiness observatory in Brazil, investigating its social and environmental impacts through journalistic writing and investigation.	Due to mainly working with agribusiness impacts on local and traditional communities, only 1 article was found that correlated with the study objectives.	**(1)** Bahia cede áreas de comunidades tradicionais para produção de energia eólica (Bahia sedes areas of traditional communities for the production of wind energy) - article published 19/10/2021

EcoDebate **Website:**https://www.ecodebate.com.br/	A non-profit e-magazine developed for the socialization of socio-environmental information. The content is selected and published with the focus of social movements and was conceived to be a tool to encourage knowledge and reflection, through news, information, opinion articles and technical articles.	Articles relevant for the major themes of this study (wind power in Bahia) and therefore assist in answering the RQ:s included in the analysis. Documents written prior to 2016 excluded, as well as articles not including the topics of wind power or Bahia (the Northeast). Total of 9 articles were excluded for containing secondary information; providing detailed information already encountered in other documentation; for not complying with the study objectives.	**(1)** "Transição para renováveis no mercado de energia é puxada por países em desenvolvimento" (Transition to renewables in the energy market is driven by developing countries) - news article published 24/07/**2020** **(2)** Geração eólica não cumpre as boas prática socioambientais, artigo de Heitor Scalambrini Costa (Wind generation does not comply with good socio-environmental practices, article by Heitor Scalambrini Costa) - article published 08/03/2021 (as a response to ABEEólica's report 'Socioeconomic and Environmental Impacts of Wind Energy Generation in Brazil')
Fórum Mudanças Climáticas e Justiça Social - Forum for Climate change and Social Justice **Website:** https://fmclimaticas.org.br/	An articulation of social movements that work to generate critical awareness of climate change with a focus on climate changes' effect on people and communities.	Articles and open letters regarding wind power in Bahia written within the past 5 years are included, articles written prior to 2016 have been excluded. Articles not containing the major themes for this study have been excluded. All articles were originally written in Portuguese and translated by the author.	**(1)** Seminário alerta para mudanças climáticas nos quatro biomas do Nordeste (Seminar warns of climate change in the four biomes of the Northeast) published 29/10/2020
INEE - Instituto Nacional de Eficiência Energética (National Institute for Energy Efficiency) **Website**: http://www.inee.org.br/	INEE is a non-profit NGO, with the objective to promote increased efficiency in the transformation and use of all types of energy sources for the benefit of the national economy, the environment and access to energy and well-being of society	1 report ('Eficiencia Energética - Uma busca permanenta' - written in portuguese, 2019) examined butexcluded due to not including any of the major themes (wind power; Bahia; sustainability; energy justice; energy transition).	**(1)** Uma Política Energética para o Desenvolvimento Sustentável (An Energy Policy for Sustainable Development) Written by Pietro Erber, director of INEE. Report written in portuguese, translated by author. **(2)** Decarbonizing the Brazilian Energy Sector - Main Issues (report written in English, 2017).

IRPAA - Instituto Regional da Pequena Agropecuária Apropriada (Regional Institute for Appropriate Small-scale Agriculture) **Website:** https://www.irpaa.org/	IRPAA is a non-governmental organization located in Juazeiro in Bahia. Effective solutions that respect the characteristics of the people and lands of the regions are promoted by the institute through its various projects.	Articles and open letters regarding wind power in Bahia written within the past 5 years are included, articles written prior to 2016 were excluded. Articles not containing the major themes for this study have been excluded. All articles are originally written in Portuguese and translated by the author.	**(1)** Parques eólicos na Bahia: uma ventania de ameaças a comunidades rurais (Wind farms in Bahia: a windstorm of threats to rural communities) - an open letter published 18/10/2016 **(2)** Audiência Pública debate instalação de parques eólicos em Curaçá (Public Hearing debates installation of wind farms in Curaçá) - public hearing involving various organizations and entities working on preserving the Caatinga, published 17/05/2016 **(3)** Energias renováveis sob a gestão popular podem ser oportunidade de geração de renda no Semiárido (Renewable energies under popular management can be an income generation opportunity in the semiarid region) - news article published 26/11/**2019**
Mapa de Conflitos envolvendo Injustiça Ambiental e Saúde no Brasil - Map of conflicts involving environmental justice and health in Brazil **Website:**http://mapadeconflitos.ensp.fiocruz.br/	Part of the collective Eita! that aims to create dialogue with social movements, networks and research institutions.The Map of conflicts initiative provides information extracted either from lived experiences from communities affected by different kinds of environmental conflicts, or from reports and articles developed by NGOs and partner institutions, including academic groups, governmental institutions, Public Ministry or agencies of the judiciary.	Search engine: "Bahia", "energia éolica" (wind energy") - one result.	**(1)** BA – Comunidades lutam para reivindicar seus direitos e acelerar os processos de certificação e de titulação de terras, contra especulação e energia eólica (BA – Communities struggle to claim their rights and accelerate the certification and land titling processes, against speculation and wind energy).
Revista MISSÕES - The MISSÕES magazine. **Website**: https://www.revistamissoes.org.br/	Non-governmental non-profit organization and e-magazine that aims to spread knowledge and news focusing on civil society and cultural identity.	One additional article was reviewed but excluded for being considered too biased, mirroring the personal opinions of the writer/author.	**(1)** Modelo de expansão das eólicas gera danos sociais e ambientais (Wind expansion model generates social and environmental damage) - news article published 06/11/2018

2. Coding sheet

The coding sheet of the material is presented in tables. The tables present citations identified as relevant for the study objectives, divided in accordance with the research questions of this study and in accordance with the sub-categories identified during the coding process. The citations have assisted in drawing conclusions for the analysis, although they are all not displayed in the analysis section of the paper. All translations have been made by the author.

Acronyms of actors

ABEEólica - Associação Brasileira de Energia Eólica (Brazilian Association for wind energy)

ALBA - Assembleia Legislativa da Bahia (Legislative Assembly of Bahia)

ASA - Articulação do Semiárido (Articulation of the Semiarid)

BNDES - Banco Nacional de Desenvolvimento (National Development Bank)

Centro Clima

CERSA - Comité de Energia Renovável do Semiárido (The Committée for Renewable Energy in the Semiarid)

CPT - Commissão Pastoral da Terra (Pastoral Land Commission)

DonR - De olho nos Ruralistas **(**Keeping an Eye on the Ruralists)

ED – EcoDebate

EPE - Empresa de Pesquisa Energetica (National Company for Energy Research)

FMCJS - Fórum Mudanças Climáticas e Justiça Social **(**Forum for Climate change and Social Justice is an articulation of social movements)

GF – Governo Federal (Federal Government)

INEE - Institutio Nacional de Eficiência Energética (National Institute for Energy Efficiency)

IRPAA - Instituto Regional da Pequena Agropecuária Apropriada (Regional Institute for Small-scale Agriculture)

MC - Mapa de Conflitos - Envolvendo Injustiça Ambiental e Saúde no Brasil **(**Map of conflicts - involving environmental justice and health in Brazil)

RM - Revista MISSÕES **(**The MISSÕES magazine)

SUDENE - (Superintendência do Desenvolvimento do Nordeste (Northeast Development Superintendence)

RQ 1: *How is clean energy through wind power and the wind power expansion being framed in the documents analysed?*

Table 2.1.1 Main theme – Framing *clean energy through wind energy*

"Available to all of us, so Bahia will take the lead in the generation of wind energy throughout the country in the first half of this year." (ALBA 1)	"Wind and solar energy, unlike hydroelectric and thermoelectric plants widely used in Brazil, is ecologically correct, clean, non-polluting, reliable, rational, inexhaustible and free energy, which does not use any fuel, does not harm the environment, and it is easy to use, as well as it does not generate radioactive waste, like nuclear power plants." (ALBA 2)

"In order to enable and implement investments in wind and solar energy in Bahia, in the region of Caetité, Tanque Novo, in Morrinhos and Bom Jesus da Lapa." (ALBA 2)	"Wind energy is an abundant source of renewable energy, clean and available everywhere. The use of this energy source for the generation of electricity on a commercial scale began just over 30 years ago and, through knowledge of the aeronautical industry, equipment for generating wind energy has evolved rapidly." (ALBA 3)
"According to SDE, Bahia has received investments of more than R$ 13.06 billion in renewable energy in the last four years. Wind energy was responsible for BRL 9.93 billion with the implementation of 102 parks (2,634 MW)" (ALBA 3)	"Renewable energies are a good example of the constant effort made by the government to internalize investments. "Bahia is blessed with constant, unidirectional winds and has an excellent level of solar radiation. What we want through this proposal is to encourage and develop these natural vocations in the search for clean alternatives to generate more jobs and more income". (ALBA 3)
"The wind farms supported by BNDES contribute to the reduction of greenhouse gas emissions, adding electricity generation capacity from a clean and renewable source of resources." (BNDES 1)	"Brazil stands out with one of the world's cleanest energy matrix, with great use of hydropower plants. Low-interest incentive and financing policies, as well as fair prices made possible by electric power auctions, have led the wind power industry to grow significantly recently." (Centro Clima 1)
"Regarding the potential of renewable generation in the Northeast region, the current PDE cycle maintains the forecast of a significant participation of wind" (EPE 1)	"The main region favourable to the use of wind energy in the country is the Northeast. To boost the development of wind energy in Brazil, it is necessary to define public policies, laws that encourage it and lines of financing." (EPE 2)
"As seen, the country has made several efforts in this direction, but they are still insufficient because of the country's territorial extension. Among the arguments in favour of expanding wind farms for electricity generation, the environmental issue is certainly the most important. So much so that the growth of wind energy in the world appears exactly as a response from society for better environmental quality in energy supply." (EPE 2)	"One of the favourable environmental characteristics of wind energy is that it does not need to use water as a driving element or even as a cooling fluid, in addition, about 99% of an area used in a wind farm can be used for other purposes, such as livestock and agricultural activities." (EPE 2)
"Wind energy is a technology that has been well accepted due to the reduced environmental impacts and the few negative externalities it causes. Issues related to land use are one of the main environmental constraints to the growth of the use of wind energy potential, with the greatest objection to the construction of wind farms, in certain places, carried out by the local population, most directly affected by the impacts of the wind farms centres." (EPE 2)	"Market growth and technological development in recent years have made wind power an essential option, now and in the future, for the supply of clean energy on a large scale." (EPE 2)

"Part of the success of wind energy exploration in Brazil can be attributed to the characteristics of the wind resource and its abundance, mainly in the Northeast Region." (EPE 3)	"Strongly motivated by discussions on climate change and the consequent need to reduce the emission of greenhouse gases and other polluting gases, wind energy has been one of the fastest growing renewable sources in the world. In Brazil, since the contracting of wind projects in the 2009 Reserve Energy Auction, the wind source has become the fourth largest source of energy in the Brazilian electricity matrix, contributing about 8% of the electricity generated in 2018." (EPE 3)
"Environment, Social, and Governance - the three pillars of corporate sustainability and social impact. Wind energy provides the perfect solution, not only for its low environmental impact but also its multiplying effects." (ABEEólica 1)	"Wind energy is clean and renewable, does not produce residues in the atmosphere or in water bodies in its generation process and little affects the direction and speed of the winds, as the propellers themselves adapt and orient themselves towards the favorable position for turning. Technological improvements aimed at optimizing processes and reducing energy losses at the generating source have also made wind energy even more sustainable." (ABEEólica 2)
"Is renewable and does not pollute, helping Brazil fulfil its Climate Agreement goals." (ABEEólica 1)	"Wind energy is an essential alternative for reducing emissions related to the production of electricity in the country and compliance with international protocols" (ABEEólica 2)
"However, for specialists, there is no way to compare these situations with the generation of photovoltaic and wind energy, because both the wind and the sun are unlimited resources, and their exploitation does not make other economic activities or even the exploitation of other raw materials unfeasible. This measure can negatively affect investment in the sector, given the disincentive that taxation can cause." (ABEEólica 2)	"The conclusion of this study is that social, economic and environmental aspects are extremely positive and encouraging in relation to wind power. Here we are talking about large installations, wind farms above 30 MW, which generate large amounts of energy, transported to consumers by transmission networks. Such ventures are carried out by large investors, pension funds, banks, large national and multinational companies." (ED 2)
"That is, municipalities that had wind farms installed showed, on average, greater total and per capita real economic growth than municipalities in the same state that do not have wind farms." (ABEEólica 2)	

Table 2.1.2. *S*ub-category - framing *Clean energy*

"Renewable sources must be explored, preserved and reinforced, as a factor of competitiveness and other advantages, including environmental and political ones." (INEE 1)	"In most energy options, sustainability is limited, as only part of their socio-environmental impacts can be avoided, given that both in the manufacture of equipment necessary for the supply and use of energy, and throughout the chain of transformations that energy products suffer, from its source to obtaining useful energy, there is always use of raw materials and consumption of energy from a non-renewable source." (INEE 1)
"Consequently, given the widespread use of non-renewable sources and the limitations of gains due to increased energy efficiency, which postpone, but do not obviate, the need to expand supply, it is necessary to choose between socio-environmental impacts of different natures and intensities, because there is no clean energy. When discarding a solution, it is necessary to compute the impacts of the one that is considered more acceptable." (INEE 1)	"Due to the priority of the environmental agenda, solar, wind and planted biomass tend to have much larger shares among the primary energy sources of electricity generation in Brazil, where natural conditions are particularly favourable to their development, even without the incentives that were pertinent to their early development stage." (INEE 2)
"One of the questions raised refers, mainly, to the Brazilian energy matrix that ignores ways of life, social inequalities and exploits, on a large scale, natural resources, which is still called clean energy." (ASA 1)	"However, for those affected and experts on the subject, these energy generation models - which promote an unfair socio-environmental logic where companies win and populations and the environment lose, generating several consequences, often irreversible - do not can be called clean" (ASA 1)
"It is not because wind energy is a renewable, abundant source of energy that does not emit greenhouse gases, incorrectly called "clean", it is that we should "close our eyes" and accept that communities and the environment suffer in the hands of these highly profitable and attractive investments for large economic groups." (ED 2)	"Conflicts and violence in the Brazilian countryside continue even during the pandemic. Farmers, land grabbers, slavers, loggers, mining companies, energy companies considered "clean" etc. don't quarantine! The situation has also worsened as a result of Federal Government measures that encourage the use of pesticides and deforestation, restrict territorial and environmental rights and disallow labor and environmental inspection bodies. These measures favor the predatory dynamics of the production of grains, minerals, wood and energy, rendering invisibility the most serious crimes against the person and the environment." (CPT 1)
"From the systematization of this reality and the practices of coexistence with the biomes, the participants reflected, together, on the priorities and possible advances in the energy transition in the region. "It became clear that we need to fight politically against these false projects of so-called clean energy, the large wind and solar plants, nuclear energy. We want democratic and participatory renewable energy" (FMCJS 1)	"It is unacceptable that economic power, controlled by business groups, which reach communities supported by the discourse of "clean energy", in the promise of employment and income, continue to violate the rights of populations, without considering social and environmental aspects." (IRPAA 1)

"Another aspect noted by the report is the real "cleanliness" of the processes for obtaining renewable energy. Mining for rare earths can have a significant environmental impact, as can hydroelectric dams, which displace communities and can inundate large areas of forests, as in the case of Belo Monte in Brazil." (ED 1)	"Of course, renewable energy has gone mainstream and that's great. But this progress should not lead us to believe that renewables are a guaranteed success. Governments need to act beyond economic recovery packages and create the rules and environment to switch to the energy system.", defends Arthouros Zervos, President of REN21." (ED 1)

Table 2.1.3 Framing the *energy transition*

"In this way, the Legislative Assembly of the State of Bahia joins the fight for an ecologically correct, clean and non-polluting energy, and, after observing the legal and regimental requirements, INDICATES to the Honorable Governor of the State of Bahia, Rui Costa, and in special to the Infrastructure Secretary, Marcus Cavalcanti, the adoption of administrative measures in order to enable and implement investments in wind and solar energy in Bahia, in the region of Caetité, Tanque Novo, in Morrinhos and Bom Jesus da Lapa." (ALBA 2)	"The reduction of greenhouse gas (GHG) emissions and the carbon intensity of the economy have been identified as the main objectives associated with a transition to a low carbon economy, defined as one that has a minimum production of GHG in the biosphere, with low energy consumption, low environmental pollution and low carbon emissions." (EPE 3)
"The concept of decarbonization of the economy has been associated, in terms of energy sectors, with the idea of an energy transition, which in turn encompasses all efforts to reduce carbon intensity through the internalization of the externalities of CO2 emissions. In the same way as the broad concept of decarbonization of the economy, the energy transition can be carried out on numerous possibilities of technological arrangements and seeks to adapt to the regional needs of transport and mobility infrastructures that are characteristic of energy matrices and networks." (EPE 3)	"Professor at the University of Pernambuco - UPE, Claudemiro Lima Júnior, who mediated the debate, believes that Brazil needs to treat energy generation differently, with another vision, focusing on low-income families. "It would be an excellent public policy for the development of the semiarid region", evaluates Claudemiro. In order to be a path of development for the region, in the opinion of the UPE professor, energy would need to be "compensated in the form of financial credits", he adds." (IRPAA 3)
"It is not enough to generate non-CO2 emitting renewable energy, this energy must positively impact people's lives. Then we can start talking about a true energy transformation as I see it." (ABEEólica 1)	"Finally, in order to decarbonize the Brazilian power sector other measures than the expansion and adequate insertion of wind, solar and hydro based generation should be considered. Efficiency increases of electricity supply and demand as well as the utilization of renewable biomass should be intensified". (INEE 2)

"Through such signalling, the comparison of different options for meeting energy requirements will become more transparent and consequent and the importance of avoiding environmental impacts on health and the global climate will no longer constitute a merely rhetorical discourse. After all, what matters for sustainability is to reduce the overall costs of energy use and not just its direct costs and prices." (INEE 1)	"A subject that is not much discussed in the debate about the generation of renewable energy, but that gains shape from the formulations of organizations and social movements, is the possibility of generating this energy to obtain income for small producers, such as small companies and people who today are just consumers." (IRPAA 3)
"The importance of wind and solar for the preservation of the environment and their diminishing costs tend to increase their share in the country's electric power generation. Their intermittency, sharp supply variations and zero marginal operation cost are particularly relevant to the procedures and costs of their insertion into the National Interconnected System". (INEE 2)	

Table 2.1.4 Framing the *energy expansion*

"Therefore, the expansion of wind energy, a clean, renewable and competitive source, contributes to the diversification of the Brazilian electrical matrix and, therefore, to an increase in the security of energy supply, its competitiveness and its economic, social and environmental sustainability." (ABEEólica 2)	"Amid the escalation of Covid-19 cases in Brazil, the government of Bahia, headed by PT Rui Costa, accelerated the process of granting areas of quilombos and Fundo de pasto communities for wind power generation companies to install towers, construction sites, transmission lines and open roads for the projects. Families and leaders of traditional communities fear, as a result, the expansion of land grabbing, deforestation and drastic changes in the traditional way of life." (DonR 1)
"However, the exponential growth in energy use and the installation of wind farms in Brazil and around the world have drawn the attention of local communities, governments and environmental professionals to possible negative effects that affect or may affect the environment and these populations. Considering, also, the entire production chain of the wind sector, the aspects to be taken into account become even broader." (ABEEólica 2)	*"The new rules for the ventures are part of the Joint Normative Instruction No. 01/2020, published on July 1, when Brazil already had 60,713 deaths caused by the new coronavirus. It created a specific process to facilitate the installation of wind farms on public and vacant land, many of which are occupied by traditional communities." (DonR 1)*

"Wind power generation is growing due to the existence of good sites and stimulated by tax incentives. Their growth, however, presents a new set of problems due to their intermittence. Wind conditions are very good in the Northeast, where about 75% of the total wind power capacity has been installed." (INEE 2)	"However, this vertiginous growth happens in an uncontrolled way, generating serious socio-environmental impacts and disrespecting the rights and ways of life of the populations, as well as other large enterprises, such as hydroelectric plants, mining and agribusiness." (IRPAA 1)
"One of the most shocking aspects of how the expansion of wind energy is taking place in the Brazilian Northeast, is that it is taking place in a process of land occupation for the installation of gigantic wind farms." (CERSA 1)	"Year after year, we report success after success in the renewable energy sector. In fact, it surpasses all other fuels in terms of growth and competitiveness", recognizes Rana Adib, executive director of REN21. "But our report sends a clear warning: energy hunger continues to increase. If we don't change the entire energy system, we are deluding ourselves." (ED 1)
"There are other more appropriate and sustainable socio-environmental and economic paths, which take into account the comparative advantages of this energy source, and its use. As long as there is a coexistence of respect for people and the environment. As is well known, generations in wind farms, as well as in solar plants, need large continuous areas to install their energy capture and conversion equipment. The greater the installed power (generated energy), the greater the profit, the greater the demand for land." (CERSA 1)	"However, another sector has driven the municipality's economy and received a lot of attention from the national and state public authorities: the generation of wind energy." (MC 1)
"(…) that the evolution of the maturity/evolution/advancements of this technology worldwide, the development of technical-economic and socio-environmental studies, as well as the legal and regulatory advances in Brazil, and the fact that investors interested in this source in the country can change competitiveness, allow the use of this technology and change the projections of the next Plans, bringing important future benefits to the electric system." (EPE 1)	"5. Map the initiatives, information bank and risks associated with the transition to a low carbon economy; It is understood as necessary the mapping of policies, plans and programs capable of contributing to an energy transition. This comprehensive mapping can guide actions to internalize the externalities related to carbon emissions. The elaboration of a risk map and support for the development of actions necessary for the implementation of the transition to a low carbon economy are desirable and monitoring of its results." (EPE 3)
"With the advancement of energy efficiency programs, with the aim of making conventional energy generation more efficient, CO2 and greenhouse gas emissions have been reduced over the years, but still remain in a very high range." (EPE 2)	"4. Strengthen institutional governance and alignment; Alignment between long-term energy planning and RD&I efforts will require solid governance between MME and MCTI5 which may involve articulation with other Ministries (Ministry of the Environment, Ministry of Agriculture, Ministry of Education, among others...). This articulation is essential so that public policy plans and strategies are aligned and address the needs of the energy sector in the country. In addition, the alignment between institutions operating in the RD&I segments of the energy sector (ANEEL, ANP, BNDES, Finep, Embrapii, among others) and those that foster development in all sectors will allow for a greater strengthening of

	governance and promote greater investment efficiency, as it will facilitate knowledge and evaluation of the results obtained." (EPE 3)
"In 2001, the Atlas of the Brazilian Wind Power was prepared (Cepel, 2017), indicating an installable potential of 143 GW for the entire country. Since then, more current studies on wind potential have been published, however at the state level and each one following its set of restrictions, models and assumptions, reflecting the potential at its time of publication, in places with speeds above 7m/s. The results indicate that Brazil has an enormous onshore wind potential to be explored within the scope of the PNE 2050 study" (EPE 3)	

Table 2.1.5. Sub-categories framing wind power – *the economic aspect*

The free energy market	**Wind energy investments**	**Foreign investment**	**Economic implications of wind energy**

"Combining investment in renewable sources with the development of the free energy market" (BNDES 1)	"The present proposal that Bahia needs and wants to have aims to encourage and develop these natural vocations in the search for clean alternatives to generate employment and income. Wind energy is responsible for BRL 9.93 billion with the implementation of 102 parks (2,634 MW) and the generation of approximately 39,100 jobs throughout the production chain." (ALBA 1)	"The Chinese company CGN Energy International Holdings will invest R$ 1 billion in solar energy and wind farm in Bahia." (ALBA 2)	"The objective of this section is to estimate the possible economic impacts on the production chain of the Northeast and South regions of the country, in terms of production, mass of income, employment and tax collection, from the payment of land leases for the installation and operation of wind turbines." (ABEEólica 2)
"Recently, projects such as small hydropower plants and some wind farms considered to be of small environmental impact potential, are able to obtain a simplified environmental license, carried out in a single phase, without the need to develop detailed environmental studies. Also, the public hearing is replaced by an informative technical meeting" (Centro Clima 1)	"The expectation is that investments of around R$ 1 billion will be made in wind and solar energy in Bahia, in the region of Caetité, Tanque Novo, in Morrinhos and Bom Jesus da Lapa." (ALBA 2)	"In the development of wind projects, Brazil has the participation of several national groups from universities and foreign groups, especially from Germany and Denmark." (EPE 1)	"Investments in the sector boost the local economy through their multiplier effects, generating employment, income and tax collection." (ABEEólica 2)
"Independent Energy Producers (PIE) are companies or a consortium of companies that receive a concession or authorization to produce and commercialize electricity generation, at their own risk, for the National Interconnected System (SIN)." (GF 1)			

"According to the Ministry of Mines and Energy (MME), this type of production allows the entry of new investors with autonomy to carry out contracts for the purchase and sale of energy, in a competitive manner and with flexibility to meet consumer requirements." (GF 1)			
"The most immediate impact was the absence of auctions because of a falling demand, meaning no sales to the regulated market in 2020. The good news is that the free market is now very important for the wind power industry. In fact, by 2018 and 2019 we were already selling more to free market clients than the regulated market." (ABEEólica 1)			
"Our performance in the free market last year was excellent, a good sign for our production chain where new transactions continue to take place." (ABEEólica 1)			

Table 2.1.6. Sub-categories framing wind power – *the environmental aspect and impacts of land-use change*

"The impacts on land use and occupation are of low magnitude, given that the percentage of free area within the limits of wind farms, indicates the feasibility of maintaining agricultural and industrial activities, resident populations and conservation areas of terrestrial fauna and flora in the areas located between the wind turbines." (ABEEólica 2)	"We are not against wind energy, or other renewable energy sources, but greater care is needed, not only to guarantee greater energy security, but also that in energy policy decisions, respect for populations and environmental health." (IRPAA 1)

"Also the new targets for renewable energies such as solar, wind, hydroelectric, and from agrofuels, coming from ethanol from sugarcane, corn or oilseeds, such as soy and African palm (oil palm) , imply more land destined to supply current and future energy demand." (CPT 1)	"We are in favour of generating energy from renewable sources such as wind and solar. What we are against is the format, the model of this energy generation that is implemented by the Brazilian State, through large companies, installing large wind farms and large solar parks". He argues that the current model causes several impacts (environmental and social), increases pressure on lands and territories, generates conflicts and strengthens income concentration. "Once again the income, the wealth of energy generation will be in the hands of a few, mainly in the hands of foreign companies", details Cícero." (IRPAA 3)

Table 2.1.7. Sub-categories framing wind power – *the social aspects*

Sub-category 1. Wind energy and land occupation	**Sub-category 2. Resistance to wind power projects**
"Wind energy occupies only a small amount of land, so farmers are able to continue to plant crops or farm livestock. Turbines occupy some 8% of the land area set aside for wind farms, and this could decrease to around 6%." (ABEEólica 1)	"Among the arguments against wind farms are the environmental, cultural and social damage to society. Deforestation, land grabbing, habitat destruction of several species of native wild animals, (gross) changes in the ways of production and life of communities, restriction of the right to come and go of peoples in their own territory, populations expelled from their localities, changes in the wind, are some of the impacts suffered by communities." (ASA 1)
"It is noteworthy that in addition to rural landowners receiving remuneration for the lease and use of their properties, wind farms are compatible with other uses of the land, for example, the landowner can continue to carry out cattle raising and agricultural activities." (ABEEólica 2)	"The event had the objective of guaranteeing an exchange of experiences and articulating the communities that are being threatened by these projects. The intention is that these will strengthen and add more strength to the resistance around the advancement of development projects in rural, riverside and coastal communities." (ASA 1)
"Land tenure regularization on which the necessary structures for wind farms will be implemented;" (ABEEólica 2)	"Gathered by state, the participants socialized the impacts they are suffering and what the experiences of resistance facing the entrance of wind farms in the territories of traditional and indigenous peoples throughout the Northeast. "The territory is sacred", says one of the participants about the belonging of people with their place of socialization, economic, social and cultural production and also their relationship with nature." (ASA 1)
Sub-category 3. Increased living standards for the local population	**Sub-category 4: Creation of jobs**
"Generates income and improves the quality of life of landowners who lease their land for wind tower placement." (ABEEólica 1)	"Although there is no specific database for the free market, we believe some 3 GW in new contracts were signed in 2020, enough to keep investments going and to generate new jobs." (ABEEólica 1)

"In turn, the initial shock, which occurred as a result of the increase in lease payments in the wind sector, has an impact on labor income and, consequently, on household consumption (income effect), characterizing an impact of increased production. on wages and, consequently, on consumption." (ABEEólica 2)	"According to the Bahian government, another 38 parks are under construction and, along with 86 new projects still in their initial phase, promises to generate more than 53,000 jobs." (ED 1)
"It generates income and improves the lives of landowners with leases for the placement of towers. We also emphasize that lease payments are subject to taxation and also contribute to public sector revenue." (ABEEólica 2)	
"Estimates point to a negative and significant relationship between installation of wind farms in the municipalities and the inequality index, which means that in the municipalities where the parks were installed there is a reduction in inequality when compared to municipalities in the same state that did not suffer this event." (ABEEólica 2)	
Sub-category 5: Community benefits	**Sub-category 6. Community impacts**
"(...) wind power has a positive impact on the community due to social, cultural, healthcare and environmental projects undertaken for the development of the local population." (ABEEólica 1)	"We, participants in the Meeting of those Impacted by Wind Energy, held in Juazeiro, in northern Bahia, 50 km from the Sobradinho dam, whose installation was responsible for the expulsion of 72,000 people from their territories, and many of these still do not have electricity, we denounce the impacts of the Brazilian energy model, especially those generated by wind farms." (IRPAA 1)
"The communities close to the wind farms also benefit from the investments made in the local infrastructure, in which there are improvements in the roads and accesses that will be used for the transport of equipment and the movement of loads during the construction of the parks, but which remain as a legacy for the municipalities." (ABEEólica 2)	"Worsening of social problems: rising cost of living, teenage pregnancy, pedophilia, deviations from roads;" (IRPAA 1)
	"The hearing was proposed by councillor Januário Ferreira, who expressed his concern about the installation of energy towers in these locations that have a rich biodiversity of plants and animals where the families in the surroundings basically live off goat farming and the extraction of umbu, means of production that can be severely affected by the presence of the wind farm." (IRPAA 2)
"Landowners end up benefiting from leasing the area for wind turbines or substation, and the cost-benefit of the ceded area is often more profitable than if an agricultural activity took place. In addition, they can benefit from the opening of operational routes for the use of vehicles and machines, or ask to have them removed at the end of the contract" (ABEEòlica 2)	"The aggressions also continue with the arrival of several outsourced companies with their workers (unplanned urbanization, violence, early pregnancy of girls in the communities/cities, with the birth of "children of the wind") to install the equipment (duration from 12 to 18 months)." (ED 2)

RQ 2: *How is development and sustainable development being framed in the different documents analysed?*

Table 2.2.1 Main theme – Framing *development*

" In this way, the Legislative Assembly of the State of Bahia joins the fight for an ecologically correct, clean and non-polluting energy, and, after observing the legal and regimental requirements, INDICATES to the Honorable Governor of the State of Bahia, Rui Costa, and in special to the Infrastructure Secretary, Marcus Cavalcanti, the adoption of administrative measures in order to enable and implement investments in wind and solar energy in Bahia, in the region of Caetité, Tanque Novo, in Morrinhos and Bom Jesus da Lapa." (ALBA 2)	""It can be seen, in the case of wind energy, due not only to the territorial extension, but, above all, to the size of the coast, Brazil has great potential for the use of such a renewable source. The Northeast region presents the best conditions, however, there is a constant need to survey and update information about the winds, in order to favor the development of new projects." (EPE 2)
"Renewable energies are a good example of the constant effort made by the government to internalize investments. "Bahia is blessed with constant, unidirectional winds and has an excellent level of solar radiation. What we want through this proposal is to encourage and develop these natural vocations in the search for clean alternatives to generate more jobs and more income"." (ALBA 3)	""The survey of the wind power potential is essential to support the technical and economic feasibility studies of wind energy projects. These studies are important for the development of a wind power project, which encompass several stages, such as negotiations and development, engineering projects, installation of equipment, infrastructure, etc." (EPE 2)

Table 2.2.2 *Climate change and development* framings

"The wind farms supported by BNDES contribute to the reduction of greenhouse gas emissions, adding electricity generation capacity from a clean and renewable source of resources." (BNDES 1)	"Regarding the effects associated with climate change, two major lines of action can be established: mitigation and adaptation efforts. The first aims to limit GHG emissions from human activities, while the second presents measures to reduce the vulnerability of natural and human systems and admits that it will be necessary to adapt to some degree, leaving to know what the possible local changes will be, periods, and what are the best solutions to circumvent the problems that may arise in each case." (EPE 3)

"BNDES investments in generation are in line with the effort of the National Plan on Climate Change (PNMC) to reduce greenhouse gas emissions." (BNDES 1)	"In terms of mitigation, Brazil stands out for having an energy matrix with a large share of renewable sources. GHG emissions from the energy sector per unit of energy consumed in Brazil are small compared to other countries." (EPE 3)
"The Plan also seeks to maintain a high share of renewable energy in the electricity matrix, preserving the prominent position that Brazil has always held in the international scenario." (BNDES 1)	"1. Uncertainties about the effect of climate change on energy supply: Due to the large share of renewable sources, variations in temperature, precipitation, wind and insolation patterns throughout the national territory, in addition to the possible damage caused by extreme events, such as droughts, floods and hurricanes, can impact the availability of renewable resources and the energy supply. It is necessary that both the enterprises and the energy infrastructure review their vulnerability to such phenomena and ensure that the electrical matrix is more resilient to them. In terms of the PNE 2050 studies, the information available so far lacks a better understanding of the possible effects of climate change. As soon as they are known and measured, it will be necessary to change the potential of inventoried resources (hydroelectric inventories of hydrographic basins, wind atlases, etc.)." (EPE 3)
"One of the most important benefits that wind energy offers to the environment is the fact that it does not emit pollutants during its operation. In this way, a comparison can be made between each unit of electricity generated (MWh) by wind turbines and the same energy that would be generated by a conventional plant. By doing this analysis, it is concluded that wind energy has great advantages in reducing the emission of greenhouse gases and in reducing the concentration of CO2 during its operation." (EPE 2)	"The generation of employment, payment of leases to landowners, the possibility of coexistence of agricultural and livestock activities with wind farms, among other reasons, collaborate with the establishment of populations living in the countryside" (ABEEólica 2)
"Responsible investment in natural resources will generate economic and social development by distributing income and fostering inclusion and a reduction in social and economic inequality." (ABEEólica 1)	"Brazil, in the second decade of the 21st century, intensified its neo-extractivist mode. The extractive-mineral, agribusiness, energy generation and hydrocarbon corporations have intensified their centrality in the national project of economic growth – especially Petrobrás, Eletrobrás, Vale SA, BRF SA, JBS, Braskem , Ultrapar Participações, CSN, CPFL Energia, among others. Discursively, they place themselves as essential for the country, for the trade balance and for the national economy." (CPT 1)

"The implementation of wind farms produces, in addition to greater energy capacity, externalities aimed at Brazilian industrial development because it is a capital-intensive activity." (ABEEólica 2)	"Therefore, planning and management of projects and activities are essential for the country to maintain high rates of economic and social expansion, through the choice of the most appropriate options and the efficient use of the resources employed. The maintenance of high rates of economic growth, better distribution of income and well-being of the population depend, among other factors, on the sustainability of this process." (INEE 1)
"The normative instruction of the Bahian government does not specify the areas in which the wind farms will be installed, nor does it mention actions necessary to preserve the environment and the springs and springs that supply rural populations. (…) The normative instruction was signed by the State Secretariat for Economic Development, the Agrarian Development Coordination of the Secretariat for Rural Development and the State Attorney General's Office . In an official note, the Bahian government argues that the installation of wind farms will "stimulate the local economy, generate employment and income, in addition to occupying a deserted area and giving it a socially adequate destination. For *Gustavo*, president of the Borda da Mata Community Association, where a wind farm has been installed since 2012, the impacts on the community are multiple. He claims that the community has seen the commons shrink and that violence has increased". (DonR1)	"(...) Through the so-called "carbon colonialism", these "green deals" can promote the mere export of socio-environmental damages – and responsibility for them – to the countries of the global South, while delaying the effective adoption of measures that impose limits on economic growth and the degradation of the planet." (CPT 1)
"In a simplified approach, the environmental effects of human activities can be local or global. Among the former, deforestation, the relocation of populations, the destruction of infrastructural goods, acid rain, vehicle emissions resulting from the use of fuels, among others, stand out. The second are mainly those related to greenhouse gas emissions that directly or indirectly cause climate change and global warming." (INEE 1)	"Energy and the environment are topics of major importance in the global discussion on global warming. The current moment of climate change and its serious effects on the people of the semiarid region deserve to be treated with more seriousness and impartiality. And not just as "business". (RM 1)

Table 2.2.3 *Environmental impacts and sustainable development*-framings

"In the Northeast region, the relevance reflects the sum of interference from wind and photovoltaic projects and transmission lines planned for the region. For wind and photovoltaic plants, the expansion in preserved areas of the semi-arid region stands out, where vegetation is particularly sensitive due to its low regeneration capacity." (EPE 1)	"Obviously, like all energy production technology, wind turbines have some unfavourable environmental characteristics such as, for example: visual impact, audible noise, electromagnetic interference, glare and damage to fauna, even on a small scale. These negative characteristics can be significantly reduced, and even eliminated, through proper planning and also through the use of technological innovations." (EPE 2)

"The energy density of wind farms is low, normally varying between 0.06 km2/MW and 0.08 km2/MW, demanding extensive areas for their installation, however, the wind turbines themselves occupy only around 1% of the area, allowing land uses for purposes such as agriculture or livestock to be applied" (EPE 2)	"This is another warning about what has been happening with these large works spreading in recent years, and contributing to the deforestation of the Caatinga, restingas, remnants of the Atlantic Forest, vegetation of high altitude swamps, …. In addition to provoking the forced exodus from the countryside, thus feeding and aggravating the process of chaotic urbanization." (RM 1)
"The Environmental Licensing requested in the process of implementing wind farms encourages designers to devise alternatives that minimize negative impacts on flora, fauna and the surrounding population." (ABEEólica 2)	"Following the preparation of the land for the installation of the wind turbine towers contributing to destruction of historic sites, serious degradation when installed in dune fields, deforestation of the caatinga biome." (ED 2)
"Another impact unknown to society is the destruction of springs. With the installation of parks in the mountains, deforestation and the devastation of the Caatinga around the towers, the springs disappeared, generating an environmental imbalance." (ASA 1)	"Environment: parks installed in spring areas, threatening the water sovereignty of communities, deforestation, extinction and scaring away animal species" (IRPAA 1)
"The normative instruction of the Bahian government does not specify the areas in which the wind farms will be installed, nor does it mention the actions necessary to preserve the environment and the springs that supply rural populations." (DonR 1)	"Among the negative effects are the suppression of vegetation, problems caused to fauna (mortality of bats, birds), changes in the hydrostatic level of the water table in the process of installing the structure of the towers, grounding and devastation of dunes, sound impact affecting the people's health" (ED 2)
"However, superior to the threats is the will of the Northeastern people to preserve their land, their culture, their nature. "We face a struggle to preserve our biomes, which are our life and the life of future generations", (FMCJS 1)	"The biggest concern, which is still little discussed outside academic circles and social movements that deal with the issue of land and the environment, is the enormous damage and socio-environmental damage caused by the centralized implementation of these electrical energy generating devices." (RM 1)

Table 2.2.4 Framing *uneven development*

"— The government says it is doing something very important for the communities, which will generate income, but we know that this income is something derisory, almost symbolic. Traditional communities have a very large productive diversity. If the intention was to benefit them, the government would discuss what they need to promote the process of production and commercialization of traditional products. This would be a truly sustainable development path." (DonR 1)	"The analysis of environmental impacts and land diagnoses that will enable the use of land by wind farms will be produced by outsourced companies hired and paid by the wind companies themselves, which, according to Edvando, favours large companies in the sector:" (DonR 1)
(...) He also explains that the implementation of the Brazilian energy matrix also contributes to the impoverishment of populations, "because it has its territory sliced and privatized. The whole relationship with the territory changes. There is more loss than gain. This energy is for what and for whom? The mechanisms are very dirty, including blood" (ASA 1)	"Edvando recalls that the amount paid to the Bahian government and traditional communities for wind farms for the use of land is a very low percentage of energy production, over which there is no control" (DonR 1)

Table 2.3 Global connection and visions of the future

Global Connection	**Future**

Table 2.8 Other sub-categories identified framing development

Sub-category 1. The energy demand	**Sub-category 3: Narratives of the Northeast and Bahia**
"Especially the generation and distribution of wind energy, has been standing out and contributing to "consolidating the Northeast as responsible for more than 85% of national wind production, a volume sufficient to meet 90% of energy demand in the region in 2019" (SUDENE 1)	"Northeast region, this region will be predominantly an exporter" (EPE 1)
""This amount of energy is enough to supply more than 16 million homes/month, considering that the average consumption of homes in the Northeast is 120 kWh/month." (ALBA 1)	"Part of the success of wind energy exploration in Brazil can be attributed to the characteristics of the wind resource and its abundance, mainly in the Northeast Region." (EPE 3)

"The Wind Complex will generate enough energy to meet consumption higher than that of the city of Salvador (more than 1 million homes)." (BNDES 1)	The Northeast region presents the best conditions, however, there is a constant need to survey and update information about the winds, in order to favor the development of new projects." (EPE 2)
"The wind farm, when completed, will generate enough energy to supply more than 1 million homes" (BNDES 1)	"The main region favourable to the use of wind energy in the country is the Northeast. To boost the development of wind energy in Brazil, it is necessary to define public policies, laws that encourage it and lines of financing." (EPE 2)
"In terms of mitigation, Brazil stands out for having an energy matrix with a large share of renewable sources. GHG emissions from the energy sector per unit of energy consumed in Brazil are small compared to other countries." (EPE 3)	
Sub-category 2. Global connection	**Sub-category 4: Economic growth**
"The Plan also seeks to maintain a high share of renewable energy in the electricity matrix, preserving the prominent position that Brazil has always held in the international scenario." (BNDES 1)	However, it is expected that, from a perspective of sustainable economic growth in the long term associated with the reduction of the level of poverty, there will be an increase in energy consumption per capita. In this situation, emissions from the energy sector, in absolute terms, will increase towards 2050." (EPE 3)
"The Brazilian wind potential has aroused the interest of several manufacturers and representatives of the main countries involved with this technology." (EPE 2)	**Sub-category 5: The future**
"However, in international forums, Brazil should encourage the adoption of this tax, as in addition to contributing to the preservation of the environment, it would increase its competitiveness at the global level, in view of its widely renewable energy matrix." (INEE 1)	"Finally, in order to decarbonize the Brazilian power sector other measures than the expansion and adequate insertion of wind, solar and hydro based generation should be considered. Efficiency increases of electricity supply and demand as well as the utilization of renewable biomass should be intensified". (INEE 2)
	"The ideal, in the words of the interviewees, would be to give needy families the opportunity to produce and sell energy. On the other hand, for the distributors there would be no change, it would be a purely commercial relationship. Purchasing energy from farming families, in Claudemiro's opinion, "would not be a favor for the distributor, nor for the energy companies, it [the distributor] would only be buying the energy generated by these small distributors […]. That would be a way of distributing

	wealth equally, so that you would reduce, for example, the need for these small farmers to receive a Bolsa Família", considers the professor at the UPE." (IRPAA 3)